

## **REMARKS**

This is a full and timely response to the outstanding FINAL Office Action mailed February 9, 2007. The Examiner is thanked for the thorough examination of the present application. Upon entry of this response, claims 1-28 are rejected as allegedly being directed to non-statutory subject matter. Reconsideration and allowance of the application and presently pending claims are respectfully requested.

### **II. Response to Claim Rejections Under 35 U.S.C. § 101**

Claims 1-28 stand rejected under 35 U.S.C. §101 as allegedly being directed to non-statutory subject matter. On page 2 in the "Response to Arguments" section, the Office Action alleges the following (emphasis added):

The independent claims 1 and 15 are directly related to mathematical algorithms. If the "acts" **of a claimed process** manipulate only numbers, abstract concepts or ideas, or signals representing any of the foregoing, the acts are not being applied to appropriate subject matter. . . Thus, **a process consisting** solely of mathematical operations . . . does not manipulate appropriate subject matter and thus cannot constitute a statutory process.

The Office Action further alleges on page 3 that:

[C]laims 1 and 15 are directly related to non-statutory algorithm of an equation for calculating a power spectral density (PSD) mask . . .

In response, Applicants first respectfully point out that independent claims 1 and 15 do not relate to a process but in fact clearly relate to a Digital Subscriber Line (DSL) communications **system** configured to provide a power spectral density (PSD) mask for spectral shaping of a dual bit map (DBM) mode downstream transmission. The Examiner apparently fails to appreciate that, while the PSD mask is represented by an equation, claims 1 and 15 ***do not claim an equation*** (or manipulation thereof) for

computing the power spectral density, but instead claim a DSL system configured to generate a unique PSD mask. The equation in claims 1 and 15 are used to express the characteristics of the PSD. The corresponding dependent claims provide parameters that further characterize the PSD. Applicants claim a DSL system configured to provide this particular power spectral density mask in order to improve overall system performance.

However, in the interest of furthering prosecution of the present application, Applicants have amended independent claims 1 and 15, as indicated above, in an effort to overcome the §101 rejection. Applicants respectfully submit that claims 1 and 15, as amended, are allowable under 35 U.S.C. §101. In support of this, Applicants refer to claim language in some recently allowed patents. Applicants refer to U.S. Pat. No. 7,200,733 to *Hancock* (hereinafter “the ‘733 patent”), issued April 3, 2007. The ‘733 patent includes the following claim language (emphasis added):

6. **A computer readable medium having instructions for causing a computer to perform a method of** translating a virtual address to a physical address in a real time operating system. . . .

Applicants also refer to U.S. Pat. No. 7,197,526 to *Qu* (hereinafter “the ‘526 patent”), issued March 27, 2007. The ‘526 patent actually relates to a method and apparatus for calculating the remainder of a modulo division and includes the following claim language (emphasis added):

38. **A computer program embodied in a computer readable medium for performing modulo division**, using a dividend N and an n-bit divisor D to produce a remainder R, comprising: a summing code segment for summing the upper  $\frac{n}{2}$  and lower  $\frac{n}{2}$  bits of the dividend N to produce the remainder R, when  $D = 2^n - 1$  and  $0 \leq N \leq (D-1)2$ .

The '526 patent relates to calculating an n-bit divisor D wherein D is expressed by the following equation:  $D = 2^n - 1$ ,  $0 \leq N \leq (D-1)/2$ .

In short, as an administrative agency, and pursuant to the Administrative Procedures Act, the PTO cannot arbitrarily treat different Applicants indiscriminantly. That is, it is improper for the PTO to consistently accept this claim phraseology for so many other Applicants (as reflected by the issued patents mentioned above), but then arbitrarily reject this same language submitted by the present Applicant.

As indicated above, Applicants have thus amended claim 1 and claim 15 to now recite "*A computer readable medium having instructions for providing a power spectral density (PSD) mask . . .*" Applicants further submit that the amendments made to claims 1 and 15 are supported by the specification. As known by those skilled in the art, power spectral density (PSD) are generated by components in a DSL communications system wherein the mask is applied to downstream ADSL signals to improve performance. Accordingly, Applicants respectfully request that the §101 of claims 1-28 be withdrawn.

### **III. Prior Art Made of Record**

The prior art made of record has been considered, but is not believed to affect the patentability of the presently pending claims.

**CONCLUSION**

Applicants respectfully submit that all pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephone conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

No fee is believed to be due in connection with this amendment and response to Office Action. If, however, any fee is believed to be due, you are hereby authorized to charge any such fee to Conexant's deposit account No. 50-0835.

Respectfully submitted,

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